

Technology Deployment Initiatives and Partnership Program

Request for Funding

FY 2002

FHWA Strategic Goal Area: Safety and Productivity

Project Title: Remote Data Access to TDR in Denali National Park

Problem Statement: Time Domain Reflectometry has been installed on the earth road accessing Denali National Park in an effort to better analyze the road stability for introduction of loading following spring thaw. Because of the remoteness and great distances it is difficult to access the instruments frequently to perform the analysis. A remote data access system is necessary to frequently collect the data from the TDR units at a central location for timely analysis and decisions for opening to bus traffic.

Proposal: Acquire and install a data communications system, solar powered, and ruggedized for the extreme environment.

Benefits: The temperature and moisture data can be collected frequently as conditions change without prolonged risky travel. The communications system can also remotely report condition of the data collection equipment to identify when service is necessary, avoiding extensive loss of data for down equipment between site visits.

Resources/Cost: \$25,000

Duration: The installation could be completed in a few weeks and the system would be functional for several years.

Organization/Method: WFLHD geotech and drill technician would acquire the necessary equipment and service provider and install the communications system with the help of contract labor and Park Service staff.

Submitter:

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